

The New Digital Flood Insurance Rate Map Product

Although the Federal Emergency Management Agency (FEMA) has not finalized the specifications for the new Digital Flood Insurance Rate Map (DFIRM) product, the concepts outlined in the November 1997 FEMA report entitled *Modernizing FEMA's Flood Hazard Mapping Program* still apply to the new product currently under development, with some simplification. As currently envisioned, the new DFIRM product combines the concepts of the DFIRM 2.0 and DFIRM 2.1 products cited in the November 1997 report into a single product that always includes certain basic features and meets certain minimum mapping requirements. Further, the new DFIRM product allows for the inclusion of additional options depending on community needs and available funding. A review of needs and available data would lead to a time and cost estimate and a recommendation on which options to exercise.

The new DFIRM product will be a vector product for the flood theme combined with the option of a vector or raster base map. Current DFIRMs will be able to migrate to the new DFIRM product with the addition of a base map that can be distributed. No integration of current Q3 Flood Data Product is envisioned for the new DFIRM product production, although a scanned version will probably remain an option for distribution formats. The existing Q3 Flood Data Product will remain in place until the affected community or county is converted to the new DFIRM product, at which time it will be permanently retired. The goal will be that a new DFIRM product is created for all NFIP communities.

Basic Data Common to All New DFIRM Products (Proposed)

The basic data that will be common to all new DFIRM products are as follows:

- Base map (community base or Digital Orthophoto Quarter Quadrangle);
- Georeferenced Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) data;
- Standard vector data structure (100-year floodplain, 500-year floodplain, regulatory floodway, Coastal Barrier Resource System boundaries, base flood elevations, cross sections, elevation reference marks);
- Standard database template that is expandable;
- Standard graphic specifications;
- Internal mismatches resolved;
- Map Initiatives format (in which FIRM and FBFM data/features are combined);
- Mappable Letters of Map Change included;
- Quad-based paneling;
- Standard distribution file format(s);
- Electronic Flood Insurance Study (FIS) text; and
- Metadata.

Options for the New DFIRM Product (Proposed)

FEMA is also considering the following options for the new DFIRM product:

- Community-based or countywide format;
- External mismatches resolved;
- Engineering restudy(ies) included;
- Existing profile fit to newer topographic data;
- Expanded database;
- Zone As fit to newer topographic data;
- Unmapped communities mapped;
- FIS report information improved;
- FIS report converted to countywide format;
- Elevations converted to North American Vertical Datum of 1988;
- Elevations converted to metric system;
- Supplemental images and scanned documents added;
- National Geodetic Survey benchmarks added;
- Transects for coastal studies added;
- Other hazards included;
- Inventory of structures layer included; and
- Other community options included.

FEMA will be transitioning the flood hazard map products over the next few years and, although the current guidelines and specifications identify the current processing procedures for DFIRMs, FEMA anticipates making significant changes in these products to capitalize on the opportunities presented by new technologies.